

## Energy Policy Leadership

U.S. Representative Rick Boucher, in his twelfth term representing Virginia's Ninth Congressional District, is a national leader in formulating federal energy policies. Serving as the Ranking Member of the Energy and Commerce Committee's Energy and Air Quality Subcommittee, he has a long history and deep knowledge of matters relating to energy and to the environment.

As the Democratic leader of the Energy and Air Quality Subcommittee, Congressman Boucher is uniquely positioned to influence federal legislation relating to a broad range of energy related issues including electricity generation and markets, coal use, pipeline safety, refineries and the Clean Air Act. In this role, he has successfully led a number of legislative initiatives.

### ENERGY POLICY ACT of 2005

The Energy Policy Act of 2005 (EPACT) was signed into law in August of 2005. This legislation is the most comprehensive federal energy policy in more than a decade. Representative Boucher was instrumental in authoring a number of provisions contained within EPACT:

#### Incentives for Clean Coal Technologies:

EPACT contains a number of provisions which promote the use of clean coal. These provisions were largely based on legislation that Congressman Boucher crafted with his colleagues from coal producing regions. EPACT addresses three fundamental stages involved in the commercialization of new clean coal technologies - research and development, demonstration and commercial deployment. First, the law provides for continued research and development for new innovative means of using coal for electricity generation. This research and development can include a broad range of activities such as the advanced separation technologies work being performed at Virginia Tech. EPACT also authorized \$200 million annually for the Clean Coal Power Initiative which provides funding for demonstration level projects which enable technologies which have been proven in a lab to be further tested on a pilot scale.

And EPACT includes \$2.1 billion in tax benefits for the use of coal. Included in that total are investment tax credits for the deployment of advanced clean coal technologies, including Integrated Gasification Combined Cycle (IGCC). IGCC is a technology which gasifies coal to generate electricity with minimal emissions and additionally enables the capture of carbon dioxide emissions. This technology holds great promise for the use of coal with minimal environmental effects.

#### Smart Metering:

Congressman Boucher is author of the provisions in EPACT which promote the use of advanced or smart meters. For the most part, consumers currently have their electricity consumption recorded by antiquated meters which fail to distinguish between peak and off-peak periods. The failure to apply new technologies to electricity consumption results in lost opportunities to conserve electricity, to shift more electricity usage to the off-peak periods, to lower electricity bills and to make electricity systems more efficient.

Through the use of advanced metering technologies, consumers can have real-time price information empowering them to make informed and accurate decisions regarding their electricity usage. For example, a consumer could choose to run appliances such as a dishwasher or washing machine at times when electricity is less expensive.

Customers who choose time-based pricing options benefit not only themselves but other customers as well. By reducing peak usage, the overall peak demand in a local electricity market is reduced. The partial shift in electricity consumption by consumers to off-peak periods reduces the need to build new generation and transmission facilities.

The smart metering section of EPACT authored by Representative Boucher requires states to consider the adoption of smart metering programs and additionally requires the federal government to provide technical assistance for the deployment of smart meters.

#### Reform of Public Utilities Regulatory Policy Act:

During debate of EPACT, Congressman Boucher authored a compromise which preserves Section 210 of the Public Utilities Regulatory Policy Act (PURPA) of 1978.

The original Section 210 of PURPA requires utilities to purchase electricity from qualifying cogenerators, known as qualifying facilities (QF's). These facilities are those which simultaneously produce electricity and usable thermal energy. These facilities achieve higher levels of energy efficiency by virtue of converting waste heat into steam or hot water for use in industrial processes. The provisions also require utilities to sell to the QF's backup power at times when the industrial host of the QF needs to purchase additional electricity to meet industrial needs. Section 210 was established with the goal of improving energy efficiency and the use of renewable energy.

Since the enactment of the PURPA Section 210 requirements, the wholesale electricity market has matured, and there are now markets for the purchase and sale of electricity which did not exist at the time the provisions were crafted. Therefore, it became appropriate to reform the PURPA provisions in a manner to enable the continuation of the economic and environmental benefits associated with the use of QF's while updating the mandatory purchase and sale obligations to reflect the more current state of the whole sale electricity market.

During the formation of EPACT, Congressman Boucher crafted a provision which meets this goal by repealing the mandatory purchase and sale obligations in instances in which the Federal Energy Regulatory Commission (FERC) determines that the QF has nondiscriminatory access to competitive markets for the sale and purchase of electricity.

The reforms to Section 210 of PURPA contained in EPACT are appropriate adjustments given the evolution of the electricity markets since the enactment of the original provisions. In addition, the modernization measure drafted by Representative Boucher ensures that the nation will continue to receive the substantial economic and environmental benefits associated with cogenerators which are qualifying facilities.

## STRATEGIC REFINERY RESERVE

Congressman Boucher has authored legislation to enhance the nation's refinery capacity by establishing a federal Strategic Refinery Reserve (SRR). His legislation builds upon the success of the Strategic Petroleum Reserve (SPR) by taking the common sense step of establishing a reserve which can produce refined petroleum products. The presence of such a reserve will ensure the availability of emergency refinery capacity.

The SRR is designed to help cushion the shock of extreme supply disruptions that could occur as the result of natural disasters, acts of terrorism or widespread energy infrastructure problems. The hurricanes of 2005 underscored the nation's vulnerability to supply disruptions and resulting increases in gasoline prices and also illustrated a potential vulnerability in our current SPR system: if the nation loses significant refinery capacity, crude released from the SPR cannot be easily converted into refined product. The SRR will enhance the SPR by providing the nation with the ability to produce refined product during extreme situations.

Under Congressman Boucher's legislation, the federal government will establish and operate a Strategic Refinery Reserve designed to produce 5 percent of daily demand for gasoline. During non-emergency times, the SRR will provide refined product to the federal fleet, including the Department of Defense.

## COAL TO LIQUIDS

Congressman Boucher has introduced legislation which would facilitate the conversion of coal into transportation fuel such as gasoline. There is a proven technology which enables the conversion of coal to liquid fuel. The coal liquefaction technology is economic when crude oil prices are approximately \$40 per barrel. Oil prices are currently much higher than \$40 per barrel, and the Energy Information Administration forecasts that prices of crude oil will remain above this level for the foreseeable future. Given these economics and the benefit of increasing our nation's energy independence, there is great potential in converting coal to liquid fuel.

In recognition of the considerable potential for coal to liquids technology, the Congress in 2005 enacted a 50 cents per

gallon excise tax credit for alternative fuel mixtures - including fuel derived from coal. However, the tax credit is currently set to expire in 2009. Congressman Boucher's legislation would extend the tax credit through 2020.

While coal liquefaction technologies have been used successfully for some time in various parts of the world, the technology has not been widely adopted in the United States. Currently placing in operation an 80,000 barrel per day coal to liquid facility would cost approximately \$7 billion and take between 5 and 7 years to construct. Extension of the tax credit would ensure its availability to incent the production of transportation fuels from coal.